

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) Process for the preparation of a polymeric relief structure by
 - a) coating a substrate with a coating comprising one or more radiation- sensitive ingredients,
 - b) locally treating the coated substrate with electromagnetic radiation having a periodic or random radiation-intensity pattern, forming a latent image,
 - c) polymerizing and/or crosslinking the resulting coated substrate, wherein in step c) a compound (Cs) is present that reduces the interfacial tension of the coated substrate.
2. (original) Process according to claim 1, wherein Cs is applied to the resulting coated substrate of step b).
3. (original) Process according to claim 1, wherein Cs is already present in the coating used in step a).
4. (currently amended) Process according to ~~anyone of claims 1-3~~ claim 1, wherein the radiation-sensitive ingredient(s) in step a) comprise(s) one or more monomers, in combination with one or more polymerization initiators.
5. (currently amended) Process according to ~~anyone of claims 1-4~~ claim 1, wherein in step a) the coating also comprises a polymer.
6. (original) Process according to claim 4, wherein the polymerization initiator is a mixture of a photo-initiator and a thermal initiator.
7. (currently amended) Process according to ~~anyone of claims 1-6~~ claim 1, wherein the coating is a solid film after evaporation of the volatile solvent.
8. (currently amended) Process according to ~~anyone of claims 1-7~~ claim 1, wherein a lithographic mask is used in direct contact with the photo-polymer film.

9. (currently amended) Process according to ~~anyone of claims 1-8~~ claim 1, wherein the electromagnetic radiation is UV-light in combination with a mask.

10. (currently amended) Process according to ~~anyone of claims 1-8~~ claim 1, wherein the treatment in step b) is by the use of light interference/holography.

11. (currently amended) Process according to ~~anyone of claims 1-10~~ claim 1, wherein the substrate comprises a polymer.

12. (original) Process according to claim 5, wherein the polymer in the coating of step a) has a weight averaged molecular weight (Mw) of at least 20,000 g/mol.

13. (currently amended) Process according to ~~anyone of claims 5 or 12~~ claim 5, wherein the polymer in the coating of step a) has a glass transition temperature of at least 300 K.

14. (currently amended) Process according to ~~anyone of claims 5,12-13~~ claim 5, wherein the polymer is dissolved in the monomer (s) of the radiation-sensitive coating used in step a).

15. (currently amended) Process according to ~~anyone of claims 1-14~~ claim 1, wherein the ingredient (s) in the radiation-sensitive coating is/are selected from the group comprising (meth-)acrylates, epoxies, vinyl ethers, styrenes, and thiol-enes.

16. (currently amended) Process according to ~~anyone of claims 1-15~~ claim 1, wherein Cs reduces the interfacial tension with at least 10 mJ/m².

17. (currently amended) Process according to ~~anyone of claims 1-16~~ claim 1, wherein Cs is applied in an amount of from 0.05-5 wt%, relative to the amount of the coating.

18. (currently amended) Polymeric relief structure obtainable through a process according to ~~anyone of claims 1-17~~ claim 1.

19. (original) Polymeric relief structure according to claim 18, wherein the aspect-ratio (AR) is at least 0.12, the AR being the ratio between the relief height and the distance between neighboring reliefs

20. (currently amended) Polymeric relief structure according to ~~anyone of claims 18-19~~ claim 18, wherein the maximum absolute value of the curvature ($|k_{max}|$) is at least 0.35, more preferably at least 0.45, and even more preferably at least $0.65 \mu\text{m}^{-1}$.

21. (currently amended) Polymeric relief structure according to ~~anyone of claims 18-20~~ claim 18, wherein the AR is at least 0.2.

22. (currently amended) Polymeric relief structure according to ~~anyone of claims 18-21~~ claim 18, wherein $|k_{max}|$ is at least $0.7 \mu\text{m}^{-1}$.

23. (currently amended) Process according to ~~anyone of claims 1-17~~ claim 1, wherein step b) is performed at a temperature between 175 and 375 K.

24. (currently amended) Process according to ~~anyone of claims 1-17 and 23~~ claim 1, wherein step c) is performed at a temperature of between 300 and 575 K.

25. (currently amended) A method of managing light comprising incorporating Use of a polymeric relief structure according to claim 18 anyone of claims 18-22, or prepared in a process according to anyone of claims 1-17 or 23-24 in a light-management applications element.

26. (currently amended) Method Use according to claim 25 wherein the polymeric relief structure is incorporated in diffractive- or orthographic-optical elements.

27. (currently amended) A method for replication of organic or inorganic matter comprising using as a replication master Use of a polymeric relief structure according to claim 18 anyone of claims 18-22 or prepared in a process according to anyone of claims 1-17 or 23-25 as a master for replication purposes in organic or inorganic matter.